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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,450	08/08/2003	Shizukuni Yata	SAEGU64.001DV1	4085

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EXAMINER

CANTELMO, GREGG

ART UNIT PAPER NUMBER

1745

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/637,450

Applicant(s)

YATA ET AL.

Examiner

Gregg Cantelmo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 11-26 and 30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>August 8, 2003</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 11-26, drawn to a flat secondary battery, classified in class 429, subclass 127.
 - II. Claim 30, drawn to a battery having operating-parameter measuring electrodes, classified in class 429, subclass 90.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention the battery of Group II has separate utility such as a cylindrical or button shaped battery. Likewise the invention of Group I has separate utility such as a battery which does not require operating-parameter measuring electrodes. See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II and vice versa, restriction for examination purposes as indicated is proper. Because these inventions are distinct for the reasons given above and have acquired a

separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr.Katsuhiko Arai on June 25, 2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 11-26. Affirmation of this election must be made by applicant in replying to this Office action. Claim 30 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Priority

2. This application is a divisional application of Application No. 09/700,988 filed February 5, 2001.

Acknowledgment is made of applicant's claims for foreign priority under 35 U.S.C. 119(a)-(d). The certified copies have been filed in parent Application No. 09/700,988, filed on February 5, 2001.

Information Disclosure Statement

3. The information disclosure statement filed August 8, 2003 has been placed in the application file and the information referred to therein has been considered as to the merits.

Since this application is a continuation application filed under 37 CFR 1.53 (b), the examiner has considered information, which has been considered by the Office in the parent applications. Such information need not be resubmitted in the continuing application unless the applicant desires the information to be printed on the patent.

Drawings

4. The drawings received August 8, 2003 are acceptable for examination purposes.

Claim Objections

5. Claims 17 and 18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend on a preceding multiple dependent claim. Each of claims 17 and 18 are dependent upon claims which include claim 16 which is also multiple dependent. See MPEP § 608.01(n). For the purposes of expedition, claims 17 and 18 have been further treated on the merits.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 12 recites the limitations: "the thickness A" in lines 2-3; "the porosity" in lines 3-4; "the pressure F" in line 7. There is insufficient antecedent basis for these limitations in the claim;
- b. Claim 13 recites the limitations: "the thickness A" in lines 2-3; "the porosity" in lines 3-4; "the pressure F" in line 7. There is insufficient antecedent basis for these limitations in the claim;
- c. Claim 15 recites the limitations: "the front side surface " in line 4; "the rear side surface" in line 4. There is insufficient antecedent basis for these limitations in the claim. Applicant should amend the definite article "the" to --a --;
- d. Claim 17 recites the limitations: "the front side" in line 2; "the rear side" in line 2. There is insufficient antecedent basis for these limitations in the claim as dependent upon claims 12, 13, 14 and 16 (when not dependent upon claim 15). Applicant should amend the definite article "the" to --a --;
- e. Claim 18 recites the limitation "the wall " in line 2; ". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claim 11 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. patent No. 3,920,477 (Alaburda).

Alaburda discloses a secondary battery comprising a positive electrode 23, negative electrode 21, separator 22 and non-aqueous electrolyte containing lithium salt and having a flat shape (Fig. 5, col. 3, ll. 43-56, and col. 4, ll. 19-48 as applied to claim 11).

9. Claims 11 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 60-044964-A (JP '964).

JP '964 discloses a secondary battery comprising a positive electrode 4, negative electrode 2, separator 3 and non-aqueous electrolyte containing lithium salt and having a flat shape (Figs. 1-5 and abstract as applied to claim 11).

The separator is press-bonded to the electrodes (abstract as applied to claim 14).

10. Claims 11 and 14-15 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 06-036801-A (JP '801).

JP '801 discloses a secondary battery comprising a positive electrode 1, negative electrode 4, separator 3 and non-aqueous electrolyte containing lithium salt and having a flat shape (Figs. 1-2 and abstract as applied to claim 11).

The separator is fusion bonded to the electrodes and the separator 3 must inherently have passages penetrating the separator in order to provide for ionic

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transport across the separator between the electrodes (abstract as applied to claims 14 and 15).

Double Patenting

11. The third sentence of 35 U.S.C. 121 prohibits the use of a patent issuing on an application with respect to which a requirement for restriction has been made, or on an application filed as a result of such a requirement, as a reference against any divisional application, if the divisional application is filed before the issuance of the patent. It should be apparent that the instant application was filed as a direct result of the restriction requirement in the parent case, U.S. Application Serial No. 09/700,988. As such the parent case claims are not applicable under a prior art rejection or double patenting rejection.

Allowable Subject Matter

12. Claim 12 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Claims 13 and 16-26, all dependent upon claim 12 are also allowable.

13. The following is a statement of reasons for the indication of allowable subject matter: none of the prior art of record appears to teach, suggest or render obvious the invention of claim 12.

While the battery of claim 11 is well known in the art, the prior art of record does not teach or suggest the separator which has the thickness, porosity and change rate of thickness as set forth in claim 12.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (571) 272-1283. The examiner can normally be reached on Monday to Thursday from 9 a.m. to 6 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pat Ryan, can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. FAXES received after 4 p.m. will not be processed until the following business day. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gregg Cantelmo
Primary Examiner
Art Unit 1745

gc



June 26, 2004